

Commonwealth of Pennsylvania Public School Employees' Retirement System

DATE: April 11, 2011

SUBJECT: Capula Tail Risk Fund Recommendation

TO: Members of the Board

FROM: James H. Grossman, Jr., CPA, CFA
Managing Director of External Public Markets, Risk & Compliance

At the Finance Committee meeting in April, staff and Aksia will recommend that PSERS invest \$250 million in the Capula Tail Risk Fund Limited (TRF), Class C shares. This fund is an actively managed portfolio of tail risk hedges across asset classes in developed markets, including equities, credit, foreign exchange, and interest rates. Capula's stated goal is to deliver protection equal to a traditional rolling S&P 500 Index put strategy through a diverse portfolio of actively managed tail hedges, readily monetizable, while minimizing carry costs. Capula has been utilizing this strategy in the Capula Global Relative Value (GRV) Fund (a fund we recently invested in), and this strategy helped them weather the 2008 crisis. The genesis of this product is from GRV Fund investor requests for Capula to create a stand alone tail risk hedge product. The product was launched March 1, 2010 (Class C shares were launched October 1, 2010). The TRF currently has approximately \$1.5 billion in assets under management. To attest to their ability to add value even when the market is increasing, the TRF returned 4.13% since inception through March 31, 2011. Over this same time period, the S&P 500 Index returned 21.39%. It is this ability to control costs and actively manage a portfolio of tail risk hedges that attracted us to this product.

Capula Investment Management was formed in 2005 by former members of JP Morgan's Proprietary Trading Group, led by Yan Huo, CIO. Capula is a UK registered global investment management firm with offices in London, Tokyo, and Connecticut. They manage approximately \$9.1 billion as of January 2011 in three separate products. Capula has had very consistent performance since their inception in 2005, strong risk controls, and very good diversification characteristics to the existing managers in our absolute return program.

Staffs' objective for investing in the TRF is to reduce the residual beta exposure within the Absolute Return Program. Our program has a historical correlation with the S&P 500 Index of 0.42, higher than we desire. However, while we believe that the correlation is lower today due to the addition of managers over the past couple of years, we still believe that residual beta to equity and credit markets exist. Aksia reviewed our program at the end of 2010 and estimated that the program's forward looking beta exposure to credit markets is 0.30 and to equity markets is 0.28. We estimate that an investment of \$250 million in the TRF will partially mitigate this risk by approximately 20%. Staff is currently exploring additional strategies to help further mitigate beta risk.

Included for your review are Aksia's recommendation, a powerpoint presentation prepared by staff, Capula's presentation, and the resolution recommending an investment in Capula TRF. Representatives from Capula will make a presentation to the Finance Committee and will be available for any Q & A.

If you have any questions or comments prior to the meeting, please contact me at 717-720-4703.



Manager Recommendation Memo

April 11th, 2011

Board of Trustees
Pennsylvania Public School Employees' Retirement System
5 North Fifth Street
Harrisburg, PA 17101

Re: Capula Tail Risk Fund

Dear Trustees:

Aksia LLC, having been duly authorized by the Board of PSERS, has evaluated and herewith recommends a direct allocation to Capula Tail Risk Fund ("Capula Tail Risk"). In the ongoing development of PSERS' portfolio of absolute return funds, Aksia recommends an initial allocation in line with Exhibit D of PSERS Investment Policy Statement, Objectives, and Guidelines.

In the aftermath of the 2008 financial crisis, new tail risk funds have proliferated in the marketplace. Capula Tail Risk Fund distinguishes itself by dint of its trades originating in the hedge book for the Capula Global Relative Value Fund. The focus on hedging the risks of a fixed income Relative Value portfolio leads the manager to look for trades that should profit from conditions that threaten its leveraged, derivative-laden portfolio: illiquidity, the breakdown of statistical relationships in markets, and heightened systemic risk.

Aksia's recommendation is based upon the following analytical factors and is made within the context of PSERS' investment guidelines.

- Due diligence of Capula Tail Risk's investment strategy, including a review of their investment strategy, investment team and structure, and risk management process.
- Due diligence of Capula Tail Risk's operations, including an operations and infrastructure review, regulatory and compliance review, private placement memorandum review, Form ADV review, and financial statement review.
- Evaluation of the Capula Tail Risk's investment strategy within the context of the current investment environment.
- Appropriateness of the Capula Tail Risk fund for the Absolute Return component of PSERS' portfolio.

This recommendation is confidential, given solely for the benefit of PSERS and cannot be relied upon by other investors considering an investment in Capula Tail Risk, since their needs, objectives and circumstances may not be identical to those of PSERS. The scope of this recommendation is limited to the investment merits of the Capula Tail Risk Fund. Aksia manager recommendation memos should be reviewed with other Aksia due diligence materials, including the full Investment Review and Operational Review. In addition, please

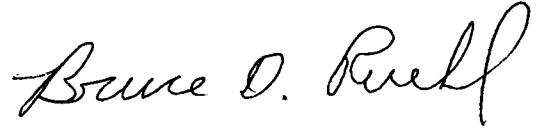
consult your tax, legal and/or regulatory advisors before allocating to any private investment fund.

Please feel free to contact us should you have any questions about this recommendation.

Respectfully,

A handwritten signature in black ink, appearing to read 'NK' followed by a long horizontal flourish.

Norman Kilarjian
Partner, Head of Tactical Trading and Relative
Value

A handwritten signature in black ink, reading 'Bruce D. Ruehl' in a cursive style.

Bruce Ruehl
Partner, Head of Americas Advisory